spring. The over-arching wood represents the growth of the present year, produced by the active cambium simultaneously with the growth of the callous. The surface of the pustule shows no evidence of external mechanical injury, although it is very possible that extremely small insect punctures would escape detection. The very local occurrence of the condition would, however, seem to argue against the possibility of insect injury.

The presence of the pronounced line or break below the callous growth may be significant. The line or break appears to increase along the margin of the annual ring of wood slightly in advance of the callous. Any given break, once established at the margin of a wood layer, continues only along that margin. The process might thus be likened somewhat to checking, toward which the wood shows a pronounced tendency. Thus the separation of the layers of wood may serve as a secondary in-

jury-stimulus to the further production of callous.

These suggestions are offered merely as interesting possibilities in the etiology of this peculiar condition. The writer is not prepared to undertake a detailed pathological study now. In the present connection, it is perhaps sufficient to emphasize that the peculiar ribbon-like development of the stems, well-known in Arctostaphylos myrtifolia, is clearly a pathological condition, manifest in its characteristic form only in later life. Its occurrence in many, but not all, individuals of the species, as well as its occasional occurrence in Arctostaphylos viscida, render untenable its use as a reliable systematic character.

University of California, Berkeley, July, 1934.

## MARCUS EUGENE JONES

Caught in one of the numerous traffic accidents which prevail upon the public roadways of California, Marcus E. Jones was killed at San Bernardino on June 3, 1934, at the age of eighty-Born at Jefferson, Ashtabula County, Ohio, on April 25, 1852, his family moved during his late childhood to a farm in Iowa, where he later took a bachelor's and a master's degree at Iowa (Grinnell) College. The greater portion of his adult life he lived at Salt Lake City and had employment at a kind of mine inspection, a work which took him on many journeys over the Great Basin region and more or less throughout the Pacific portion of the United States. While on these travels he assiduously collected the native seed plants "on the side" and built up a large herbarium, doubtless the most valuable that has ever been made for the Great Basin. At the same time he acquired a field knowledge of the flora which enabled him to recognize and publish many species from western America, of which many have been well sustained. His "Contributions to Western Botany" comprise eighteen papers; the larger number of which with much

industry he set in type and printed himself. His "Monograph of the North American Species of Astragalus" (1923) he considered to be his opus magnum. For this he also set the type

and printed the sheets.

It would have been natural and fitting that his herbarium should remain with some institution at or near Salt Lake City. However, the prescient enterprise of Professor P. A. Munz brought about its purchase for Pomona College and it has thus, at Claremont, been added to the botanical assets of California. For several years prior to his death Mr. Jones was the Honorary Curator of the Pomona College Herbarium.

The herbarium of Jones was of great interest and furnished convincing evidence of his zeal as a collector. It contained specimens gathered by him in Iowa in 1870, in California in 1934. In all the intervening years, for the amazing period of sixty-four years, he kept unremittingly on, botanizing throughout the West and down into Mexico. Hardy and resourceful in body, untiring, fitted to live on any food and sleep in any place, quite insensitive to the trials and difficulties which wear down most men of feeling and refinement, he was admirably fitted for his task and betrayed, as the years ran on, no sign of senility. But for the fatal accident that ended his life, he would undoubtedly have continued aggressively active for many many years.

tinued aggressively active for many many years.

In one of his autobiographic sketches Jones claims when in college to have had thorough training in Latin and Greek, and one would not wish to dispute it. Still anyone who has studied the beautiful language of Caesar and Virgil has thereby acquired a kind of power to produce lucid, expressive and forceful English not often to be had in any other way. This training implied by the Latin discipline is not obvious in Jones' writings. Botanists are often annoyed to find the content of his words dubious, or to find various descriptions defiant of meaning or sense. This is due, however, not to lack of Latin, but to a dis-

orderly habit of mind which even Latin could not cure.

A not inconsiderable portion of his life Jones gave to personal attacks on various botanists. Here, interestingly enough, there is no doubt as to his meaning. Although these attacks were prolonged over so long a period no botanist answered his assaults, and this silence, never broken, seemed to exasperate him with the result that he became more savage as the years deepened. It would seem, we think, a strange way to spend a lifetime, but it is clear that he thoroughly enjoyed these one-sided battles. Ludicrous situations sometimes developed. A prominent Californian botanist, wishing to protect himself from criticism by Jones, laid a garland of flattery before him. Although extremely susceptible to such form of address, Jones overlooked the offering and flayed this man impartially. The expression of consternation on the face of this botanist as he read the next

issue of Jones' Contributions may be recorded by way of persiflage. Intermixed with all this diatribe one finds traces of sardonic humor that enliven the pages a bit; a definition of systematic botany as something which is done as far away as possible from the field where the living plants are found and with as little knowledge of them as possible.

Botanical history is full of eulogy of botanists with a sprink-ling here and there of detraction. There is no objection to eulogy and doubtless detraction does not matter. That which matters in systematic botany is something utterly impersonal and has to do only with the plant and the records concerning it. At one time, long ago, botanists were well content to describe a new species from the "Northwest Coast" or from "California." Nowadays there is not only demanded an exact station, but also the essential facts regarding the edaphic conditions, associated species, climate and altitude. In this respect Jones' specimens are often deficient. His plants usually carry locality labels but the place name may be hopelessly obscure or be a duplicated place name.

This man has in California one or two strong admirers. One or both can perform a real service to western botany and do for Jones' records what he could not do for them himself, that is supply certain essential facts which will enable his stations to be defined. At this time a running itinerary would furnish the necessary clues. This is a plain duty. Caecilius Plinius Secundus has described well the stigma which attaches to a man who basks in the favor of another when living and yet refuses to do aught for him when he is dead. This canon of Roman manhood applies still to men of honor and sensibility. Let the one who has exalted Jones in life, turn not full away from him now that he is dead.—W. L. Jepson.

## CRITICAL NOTES ON ERIOPHYLLUM LAG.—II

LINCOLN CONSTANCE

## The Achenes of Trichophyllum multiflorum Nuttall

Nuttall erected the genus Trichophyllum (1) upon Actinella lanata Pursh (2), and it was not until 1883 that the relation of this genus to Eriophyllum Lag. and Bahia Lag. was fully appreciated. During the period that the first genus was still considered valid, Hooker added to it Trichophyllum integrifolium (3), from specimens obtained by Douglas, and Nuttall described Trichophyllum multiflorum (4), which was based upon Wyeth's collections.

De Candolle (5) merged Trichophyllum and Eriophyllum with Bahia, and in 1876 (6) Gray reduced Bahia multiflora to synonymy with Bahia integrifolia, under the latter name. Seven